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| EXAMINER |
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BRAHAN, THOMAS J

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3654

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/531,261 | Applicant(s) CARLSEN, BORGE | |
| | Examiner Thomas J. Brahan | Art Unit 3654 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/01/06</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, drawn to staircase lift, classified in class 187, subclass 201.
 - II. Claim 16, drawn to the use of a moveable carrier frame, unclassifiable; no structure is recited for the frame, just an intended use.
 - III. Claims 17- 24, drawn to a rail, classified in class 104, subclass 118.
2. Inventions I and II do not have a clear relationship for purposes of restriction, as claim 16 (Invention II) is not in proper U.S. form. Inventions I and III are related as combination and sub-combination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (claims 1-15) relies on the structure of the first and second guiding means for potential allowability and the subcombination (claims 17-24) relies on the internal rail features. Also, the sub-combination has separate utility such as for hanging wall panels. Inventions II and III do not have a clear relationship for purposes of restriction, as claim 16 is devoid of claim limitations. With respect to the restriction between combination and subcombination inventions, if applicant elects the subcombination, and claims thereto are subsequently found allowable, any claims depending from, or otherwise including all the limitations of the allowable subcombination, will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Because the inventions are independent or distinct for the reasons given above, because there would be a serious burden (after amendment) if restriction is not required, and because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. To expedite prosecution, an action on the merits follows.
4. The disclosure is objected to because of the following informalities. The drawings and specification use the same references numerals for differing elements within the two embodiments. For example, the reference numeral "2" is used for different rails, the reference numeral "4" is used for two different moveable frames, and the reference numeral "10" is used both for slide shows and for rollers. Appropriate correction is required.

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5. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the folding seat of claim 13 must be shown, or the feature must be canceled from the claims. No new matter may be entered.

6. Corrected drawing sheets submitted to overcome the above objections, must be in compliance with 37 CFR 1.121(d) and are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

7. If the changes are not accepted by the examiner, because for example introducing new matter, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

8. The following is a quotation of the all of the paragraphs of 35 U.S.C. § 112:

1) The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

3) A claim may be written in independent or if the nature of the case admits, in dependent or multiple dependent form.

4) Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

5) A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which is being considered.

6) An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

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9. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Claim 20 is not understood. Where are these different distances discussed in the specification?

10. Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document. For example:

- In claim 1, line 5, the term "the rail guide means" lacks antecedent basis within the claim.
- In claim 1, line 7, the term "of a rack and pinion type" is vague and indefinite as it unclear as to what would or would not be considered as of a rack and pinion type, as the term "type" appears to be included in the limitation as to have it read on similar devices which are not pure rack and pinion drives.
- In claim 1, lines 8 and 9, the term "the vertically disposed pinion" lacks antecedent basis within the claim.
- In claim 1, line 16, the term "the pivotally arranged first and second guiding means" lacks antecedent basis within the claim. Note that line 13 provides a basis for *sets* of guiding means, but line 16 is not using the same language for the guiding means.
- In the last two lines of claim 1, the term "the traction plane" lacks antecedent basis within the claim. It is also unclear as to how the applicant is using this term. Which plane is this and how is it considered as a traction plane?
- In claim 2, line 3, the term "the pinion drive wheel" lacks antecedent basis within the claims.
- Claim 2 is confusing as it adds "at least one carrier member" in line 2 and then lines 6 and discuss two "essentially vertically arranged carrier member".
- The last line of claim 2, refers to "the carrier member" without indicating which of the various carrier members is being used to establish the rotary axis of the guiding means.
- Claim 3 adds a pivoting aspect for the control levers which appears to be redundantly claiming the pivoting already recited in claim 1.
- In claims 4 and 9, the term "the rack of the guide rail" lacks antecedent basis within the claims.
- In claim 4, lines 6 and 7, the term "the carrier members" lacks antecedent basis within the claims.
- In claim 5, the term "the carrier member" lacks antecedent basis within the claims.
- It is unclear as to how claim 15 can recite "further conductor rails" when it depends from a claim which does not a first set of conductor rails.

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11. Claim 16 is rejected under 35 U.S.C. § 112, second and fourth paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, and for failing to further limit the invention of the claim from which it depends.. It is unclear as to what structure applicant is intending to claim and how the claim can depend from claim 1. Claim 16 fails to include any claim limitations.

12. Claims 17-24 are rejected under 35 U.S.C. § 112, second and fourth paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, and for failing to further limit the invention of the claim from which it depends. For example:

- Claim 17 is not understood as it is unclear as to how much of the structure of claim 1 is being incorporated into the claim.
- It is unclear as to how claim 17 can depend from claim 1 as they are drawn to differing inventions.
- In claim 17, lines 2 and 3, the term "said guide rail" lacks antecedent basis within the claims.
- In claim 17, line 7, the term "the traction plane" lacks antecedent basis within the claims. Also, this term is not understood. What is a traction plane?
- In claim 20, the terms "the side mounting means" and "the carrier member support surface" lack antecedent basis within the claims.
- Claim 20 is not understood. Which surfaces is applicant attempting to claim? How can these distances be claimed, when the articles defining the distances, the members and the means, are not part of claimed combination for the rail?
- It is unclear as to how claim 22 further limits the claimed invention. It fails to add any structural features for the claimed rail. It only adds the functional language of the contact members as being for a lift panel. As the contact members are already recited in claim 21, claim 22 adds no structure.
- In claim 24, the limitations "such as a coloured surface" and "preferably by being anodized" render the claim indefinite for failing to positively and distinctly claim the subject matter of the invention.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 6, 8, 10-12 and 16, as understood, are rejected under 35 U.S.C. § 102(b) as being anticipated by Bor. Bor shows a staircase lift for transporting a disabled person between floors, including; at least one guide rail (top rail 1) extending substantially parallel to a stairway, a moveable carrier frame (13) suspended from the guide rail means including carrier support means,

drive means of a rack and pinion type drive (see figure 4) for displacement of the carrier frame (13) along the guide rail (1), in which the vertically disposed pinion (12) engaging the rack is provided on the lower side of the guide rail (1);

wherein the at least one guide rail is including internal support surfaces which are engaged by the carrier support means (see figure 5);

wherein the drive means is comprising a first and second set of guiding means (transmission elements 5) pivotally arranged one behind the other on each side of the pinion drive wheel in the frame, characterized in that the pivotally arranged first and second guiding means each include a movement control lever with a first end where at least one set of guiding members are mounted, a second end at which point the first and second movement control levers are joined to each other by a universal joint (the ball joints on 5), said universal joint being substantially in the traction plane.

The carrier members and guiding members are rollers, as recited in claims 6 and 8. The guide rail has curved portions, as recited in claim 10, and upper and lower rail portions, as recited in claim 11. The carrier frame has a platform (13) adapted to accommodate a wheelchair, as recited in claim 12.

16. Claims 17-20, as understood, are rejected under 35 U.S.C. § 102(b) as being anticipated by Bischof et al. Bischof et al shows a rail including a generally reverse U-shape comprising a bottom rail opening beside a groove for receiving a rack (7) for cooperating with a pinion drive wheel, and wherein the guide rail in its internal cavity is provided with at least one support surface essentially perpendicular to the traction plane for receiving one or more carrier members and a number of substantially vertical support surfaces for receiving engagement with a number of guide members. Bischof et al includes side mounting means (grooves 16; for mounting inspection plate 19), as recited in claim 18. The guide rail has opposing surfaces, as broadly recited in claim 19, with some of the surfaces with steps, as to read on the upper and lower surfaces and their distances from the side mounts, all for sides of the rail has mounting slots, as claim 20 is best understood.

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17. Claims 1-4, 6, 8, 10 and 13-16, as understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bruno et al in view of Duijnstee (both cited by applicant). Bruno et al shows a staircase lift for transporting a disabled person between floors, including at least one guide rail (beam 50, support flange 52, guide 54 and shield 56) extending substantially parallel to a stairway, a moveable carrier frame (14) suspended from the guide rail means including carrier support means (18), a drive means of a rack and pinion type drive (92/94) for displacement of the carrier frame (14) along the guide rail (26), in which the vertically disposed pinion (92) engaging the rack is provided on the lower side of the guide rail (26), wherein the at least one guide rail is including internal support surfaces which are engaged by the carrier support means (at retaining wheels 128 and 132). Bruno et al varies from the claims by not having the forward retaining wheels linked to the rear retaining wheels by a universal joint. Duijnstee shows a similar staircase lift with the forward retaining wheels linked to the rear retaining wheels with lever arms joined at a universal joint (ball joint 28/29). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the retaining wheels (128 and 132) of Bruno et al by interconnecting them with a universal joint, as to have them track curved rails better, as taught by Duijnstee. Bruno et al has at least one carrier member (142) arranged above the pinion drive wheel substantially in a traction plane and with an axis of rotation which is substantially perpendicular to the direction of travel, vertically arranged carrier members (110) and top and bottom guiding members (128 and 132) having a rotary axis substantially perpendicular to that of the carrier members, as recited in claim 2. The lever arms of Duijnstee are pivoted to the carrier frame (at 19 and 21) an equal distance from the universal joint, as recited in claim 3. The guide rail of Bruno et al (beam 50, support flange 52, guide 54 and shield 56) has a generally U-shape (the "U" open to the left as seen in figure 4), with a lower rail opening beside the rack (94) of the guide rail, and wherein the guide rail in its internal cavity is provided with at least one support surface essentially perpendicular to the traction plane for receiving the carrier members (lower wheel 110 and wheel 142) and a number (one) of substantially vertical support surfaces for receiving engagement with the guide members (132), as recite in claim 4. The carrier members and guiding members are rollers, as recited in claims 6 and 8. Bruno et al has curved guide rail portions, as recited in claim 10. Bruno et al has a folding seat (18), see column 4, lines 16-19, as recited in claim 13, and conducting rails (158) as recited in claims 14 and 15.

18. Claims 5 and 7, as understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bruno et al in view of Duijnstee, as applied above to claim 1, and further in view of Ando. Bruno et al, as modified, shows the basic claimed lift device, but varies from the claims by having rollers for the bearing members instead of slide shoes. Ando shows an elevator rail system and teaches that elevators cages are typically guided by shoes or rollers, see the second paragraph of the Background of the Invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made by

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applicant to modify the sliding wall rail system of Bruno et al by using slide shoes instead for rollers for the bearing means, as these are art recognized equivalents, as taught by Ando.

19. Claim 9, as understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Bruno et al in view of Duijnstee, as applied above to claim 1, and further in view of Carlsen. Bruno et al shows the basic claimed lift device, as detailed above, but varies from the claims by not having circular teeth on the pinion wheel. Carlsen shows a similar lift device with a pinion wheel (7) with circular teeth (7a). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the sliding wall rail system of Bischof et al by having circular teeth on the pinion wheel, as to keep the teeth in alignment as the frame moves along the rails, as taught by Carlsen.


20. Claims 14 and 15, as understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bruno et al in view of Duijnstee, as applied above to claims 1 and 13, and further in view of Fujita et al. Bruno et al, as modified, shows the basic claimed lift device, but varies from the claims by not having a conductor rail. Fujita et al shows a similar lift device which has conducting rails (10). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the lift device of Bruno et al by providing the rail with conducting rails, to provide electricity to the drive motor, as taught by Fujita et al.

21. Claims 21 and 22, as understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bischof et al in view of Krähenbühl et al. Bischof et al shows the basic claimed U-shaped rail, as detailed above, but varies from the claims by not having a conductor rail. Krähenbühl et al shows a similar rail for a sliding wall partition which has a conducting rail (21). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the sliding wall rail system of Bischof et al by providing the rail with a conducting rail, to provide electricity to the drive motor, as taught by Krähenbühl et al. The intended use of the conductor rails, for powering a lift panel control, as recited in claim 22, is not given any weight, as only the rail is being recited as the claimed structure.

22. Claims 23 and 24, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bischof et al in view of Sprague. Bischof et al shows the basic claimed U-shaped rail, as detailed above, but varies from the claims by specifying that it is made of anodized aluminum. Sprague shows a similar rail (102) made of aluminum and anodized as to have an attractive finish, see column 4, lines 45-49. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to make the rail of Bischof et al of anodized aluminum, for an attractive finish, as taught by Sprague.

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23. An inquiry concerning this communication should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas J. Brahan
Primary Examiner
Art Unit 3654